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Advanced Weather Interactive Processing System
(AWIPS)

Change Management Procedures Handbook

January, 2000

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INTRODUCTION

This handbook describes the process and associated procedures that implement the Configuration Management policies stated in the Weather Service Operations Manual, Chapter A-21, "NWS Configuration Management for Operational systems" for the Advanced Weather Interactive Processing System (AWIPS).

A standardized process is used to introduce new products and processes and to change exiting products and processes. The process is closed-loop and self-correcting. Each step has "value-added" significance for the purposes of accommodating change and ensuring consistent conformance. The closed-loop process described herein results in the ability to "Change Faster and Document Better".

Although this handbook is intended for use by Change Management Analysts who manage and coordinate AWIPS Requests for Change, it may be of use to other offices within the National Weather Service (NWS) as a general guide.

CHANGE PROCESS OVERVIEW

Proposed changes to the AWIPS systems should serve one or more of the following purposes: (1) achieve, maintain or improve functional or operational characteristics, (2) correct safety deficiencies, (3) improve scheduling, or (4) reduce program costs. The change must be evaluated at a minimum, for technical requirements, operational impact, implementation methods, cost, support, logistics and schedule impact to AWIPS and other systems interfaced to AWIPS.

Assurance that: requests are mapped with requirements and are properly reviewed; impacts and other characteristics are assessed; proper implementation is performed; documentation is updated and validated as required; and that changes are tracked, is obtained by managing change activity with a well defined standardized process using a closed-loop model. Figure 1. Depicts the closed loop model presented herein. The following is a brief overview of the change process.

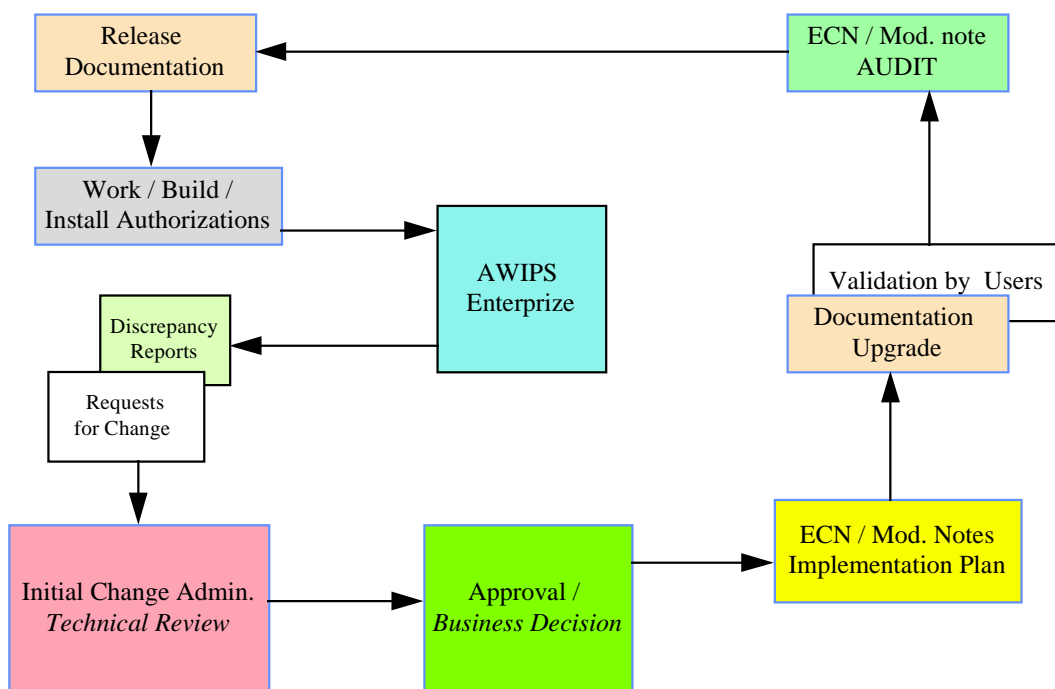
1. The requesting individual prepares a Request For Change (RC) using a standard form, *NWSRC Form¹ 1001*.

¹Available at: <http://www.nws.noaa.gov/oso/oso1/oso11/oso112/awips.html>

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Closed-Loop Change Process

“Change Faster - Document Better”



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Figure 1. Closed-Loop Change Process Model

2. The RC Form is sent to the Submitting Authority (SA) for evaluation and concurrence. If the SA determines that the request is valid it is then forwarded to the Systems Change Manager via the SA to mailbox NWSRC@noaa.gov.
3. The NWS Systems Change Manager receives the request from NWSRC mailbox and assigns it to the appropriate analyst who coordinates the initial change administration.
4. The Change Analyst performs an initial review of the request and prepares change proposals for decision disposition; coordinates and tracks change implementation; verifies completion of approved changes; and provides status accounting information of all requests.
5. The AWIPS Configuration Control Board determines change disposition (approve / disapprove / elevate).
6. Once a change is approved implementation plans are carried out.
 - a. Engineering Change Notices (ECN) and or Modification Notes and instructions are developed / finalized.
 - b. Official Baseline documentation is updated and validated.
 - c. ECNs and Modification notes are audited.
 - d. Documents are released.
7. Development work is completed and hardware/software installations are performed, tested and documented.
8. The Request for Change is closed and necessary AWIPS Configuration Management data base / status reports are updated once the change is reported to the Weather Service Headquarters through the Engineering Management Reporting System (EMRS).

A special case of Requests for Change (RCs) called Region Approved Requests for Change exists. Connections to a limited number of local AWIPS/LDAD interfaces may be accomplished with Region Approved RCs. Such requests may be approved by the region if the necessary conditions are met. See the section titled Region Approved Requests for Change for details and process description.

AWIPS BASELINE

The AWIPS product baseline has been established and is under formal NWS configuration management and change control². Any change to the AWIPS baseline requires the generation and submission of a Request for Change (RC).

The AWIPS baseline is an approved reference point that defines the system's form, fit, and functional requirements; and consequently establishes the basis for system performance and conformance. The baseline is defined by documentation (e.g., specifications, design documents, test procedures, computer programs, etc.².

The following is a *fundamental* list of documents which define the baseline, see Appendix A for a listing of specific documents:

- Engineering Drawings

- Hardware and Software Specifications

- Interface Control Documents

- Data Sets (IP Address Data Sets, Map Background Data sets, county/zone lists, look-up/conversion tables, product/data lists, Warning region /anchor points, radar lists.)

- Operations, Management and Training Manuals

- System Administration Notes

- Contract Data Requirements Lists (CDRLs)

- Facilities Documentation

- Test Procedures

- Software Listings and Description(s)

- Plans

- Policies

Note: The above listing is provided only as a reference for the types of documents which define the AWIPS baseline. It is not an inclusive list. The latest released version of any such document shall be included in the document list used to define the baseline. An updated listing may be found on the AWIPS CM home page at: <http://www.nws.noaa.gov/oso/osol/osol1/osol12/awips.html>

²Memorandum from AWIPS Program Manager, "Formal Change Control of the Advanced Weather Interactive Processing System (AWIPS) Baseline" dated 9 September 1999.

GENERATING A REQUEST FOR CHANGE

Generating a request consists of initiating a Request for Change by a user or the next organizational level for the user's office, and coordinating the request with an appropriate Submission Authority.

Change Initiation

A request may originate from any "user", such as a member of the Weather Service Forecast Office (WFO), River Forecast Center (RFC), National Weather Service Office staff, APO office Staff, or Contractor.

A Request for Change is initiated when an activity or field office identifies a need, problem or improvement whose corrective action or implementation would result in a change to the AWIPS system baseline. The following are examples which would yield a change to the AWIPS baseline and therefore are subject to formal CM control and require the submission of a formal change request:

A problem is identified with an AWIPS display function, processing function, or data deficiency in an AWIPS requirement.

Existing Hardware resources must be enhanced (e.g. faster modem or larger disk drive storage device) in order to meet approved operational requirement or work load.

Existing hardware or software must be replaced due to obsolescence or defect, or to enhance AWIPS performance enhancement.

Testing of new (developmental) software/models or hardware which must be performed on operational systems.

New Program requirements which result in new or modified AWIPS software and/or hardware.

Errors or deficiencies in existing baseline documents.

The requesting individual prepares a Request For Change (RC) using NWSRC Form 1001. The information required in the form is coordinated with the requestor's submitting authority and whenever possible, an AWIPS Configuration Control Board (AWCCB) member which represents the requestor's office or activity.

(Refer to the "Advanced Weather Interactive Processing System Configuration Control Board Charter" for AWCCB purpose, roles and membership). Figure 2. depicts which office is the submission authority for various users.

Note: If the requesting individual is a contractor, the change request must be submitted through the Government AWIPS Contracting Office (SAOx2) in the forms invoked by the AWIPS contract.

AWIPS Change Initiation

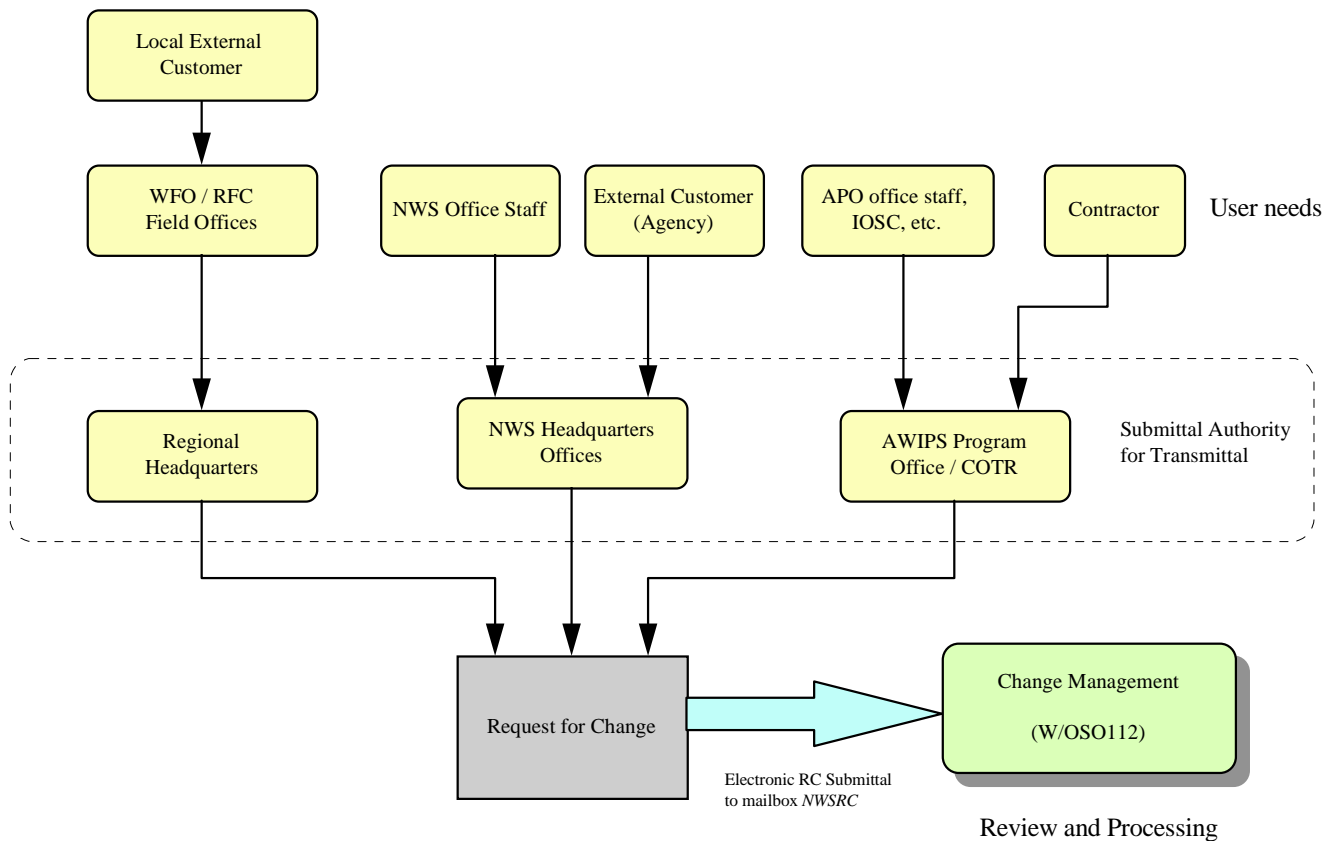


Figure 2. AWIPs Change Initiation process flow.

By coordinating the initial request through a representative AWIPS CCB (AWCCB) member, the initiator can resolve potential issues early on, and thereby improve the efficiency in obtaining all of the required information for a request. The AWCCB member can assist the initiator in:

1. Determining or evaluating the NWS or AWIPS system requirement(s) for the stated request.
2. Identifying alternatives, impacts and documents affected.
3. Identifying resources and funding.
4. Prioritizing of the request and or coordinating the implementation with other on-going or future tasks.

Coordination with Submitting Authority

Once the RC Form has been filled out, it is sent to the Submitting Authority (SA) for evaluation and concurrence.

The Submitting Authority are Office Directors, Regional Directors, AWIPS Program Office Focal Points, and the Government AWIPS Contracts Office, who also serve as AWIPS Configuration Management Focal Points for their respective office. Office or Regional director may assign AWIPS CM Focal Point representatives to serve in their stead .

The CM focal point serves as the office focal point for all CM matters and shall be responsible for the coordination and tracking of proposed changes received from the Systems Change Manager for office review. The CM focal point shall be responsible for submitting the coordinated recommendation of the office for each proposed change to the Systems Change Manager³.

The following Offices / Regions are represented by CM focal points⁴ .

NWS Office of Meteorology
NWS Office of Hydrology
NWS Office of Systems Development
NWS Office of Systems Operations
NWS AWIPS Program Office
NWS Training Center

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³WSOM Chapter A-21, "NWS Configuration Management for Operational Systems"

⁴Office names do not reflect pending NWS reorganization.

National Centers for Environmental Prediction
NWS Alaska Region Headquarters
NWS Central Region Headquarters
NWS Eastern Region Headquarters
NWS Pacific Region Headquarters
NWS Southern Region Headquarters
NWS Western Region Headquarters

A list of the specific individuals with their address, telephone number, and designates is included in Appendix B. The list is also available on the AWIPS Change Management Home Page at:
<http://www.nws.noaa.gov/oso/oso1/oso11/oso112/awips.html>

REQUEST FOR CHANGE SUBMISSION

Requests for Change shall be submitted to the NWS Systems Change Manager by a Submitting Authority. The RC may be sent in the form of an electronic (soft) copy of the RC form (in WordPerfect format) to mailbox NWSRC@noaa.gov.

REVIEW PROCESS

The review process for formal requests for change starts with the receipt of the request. A *formal request* is one which has been submitted with "signature authority", i.e. directly via an individual with Submitting Authority (or their designee). Once received, initial then detailed reviews are conducted.

Receipt of Request

The NWS Systems Change Manager receives the request from NWSRC mailbox and coordinates the initial change administration. The forwarding information and author name on the message are used to validate that a Submitting Authority individual sent the RC to the mailbox NWSRC.

If a request is sent directly by the user / or technical cognizant focal point, the request will be returned and the submitter will be asked to submit the request via their respective Submitting Authority.

Preview and Initial Analysis

The NWS Systems Change Manager previews all requests in mailbox NWSRC in order to: Validate source of the Request and programs impacted; Evaluate priority (Emergency / Urgent / Routine); and assign Change Management Analyst(s) to process the request.

The Change Management Analyst performs an initial review of the request. The initial review includes the following tasks:

- a. Determine if all required information is provided. If essential information is missing the submitting authority or cognizant technical individual(s) are contacted for further details.
- b. Determine if the Request for Change does in fact fall under the scope of the AWCCB or if the Change request should be dispatched to another entity, or both (if multiple systems are involved).
- c. Priority verification (**Emergency, Urgent, Routine**). The appropriate individuals / offices are immediately contacted as required for non routine requests. The priorities are defined as follows:

Emergency. This priority is assigned when the change is necessary to correct a hazardous condition which may result in fatal or serious injury to personnel installing or using the AWIPS equipment, or in extensive damage or destruction to equipment itself.

Urgent. An urgent priority is assigned for any of the following three reasons. (1) To effect a change which, if not accomplished expeditiously, may seriously compromise the effectiveness of the AWIPS program equipment, software or products. (2) To correct a potentially hazardous condition, the un-corrected existence of which could result in injury to personnel installing or using the AWIPS equipment, or damage to equipment itself. (A potentially hazardous condition is one which compromises safety and embodies risk, but within reasonable limits, permits continued use of the affected item provided the operator has been informed of the hazard and appropriate precautions have been defined and distributed to the user.) (3) To effect an interface change which, if delayed, would cause a significant schedule slippage, cost increase or performance degradation.

Routine. This priority applies to all requests when emergency or urgent implementation is not applicable, required or justifiable.

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- d. Change Type evaluation (Fast Track versus Normal).
 - e. Prepare a change review package consisting of the request, attachments if any, supporting information or documentation and a list of questions and issues (if any arise) which must be addressed. If necessary, the change analyst may request that an Engineering Change Project Lead from the AWIPS program office be identified to provide technical assistance in the preparation of the review package.

If a request impacts other systems (such as ASOS or NEXRAD), the analysts who work on the other system(s) are given copies of the Request for review and analysis. If the other system requires a separate change request, the change analyst coordinates the generation of the other system's request and the submitter is given notice that a separate request is being generated for analysis and processing as required by the other program.

If a change request impacts products (transmission or generation) or product software, then notice of the Request is provided to the Data Review Group (DRG), and through similar coordination, an included or a separate DRG Request for Change may be generated. The submitter is given notice in these instances.

CHANGE REVIEW

The change analyst sends the review package to the AWIPS Configuration Control Board (AWCCB) members for review. Typically the package will be sent in the form of e-mail with attachments.

Emergency Requests

Emergency requests are reviewed immediately by the AWCCB members and the AWCCB Chair. The AWCCB Chair may make an immediately "limited" approval decision with emergency request(s), upon validation. Once approved, the Chair shall provide authorization and direction for implementation of the change and for the generation of an ECP (if required) to fully document the change.

Emergency Requests shall be reviewed immediately and approval (if warranted) shall be granted immediately.

The approval is limited in cases where a more detailed (final) RC must be developed or more information (documentation, testing, etc.) may be required in the RC for permanent implementation. Once complete, the said final RC shall be subject to the review processes outlined herein.

Urgent and Routine Requests (Normal)

The AWCCB members shall review the Urgent and Routine request package(s) and forward comments, additional information (cost estimates, etc.), recommendations, and issues to the change analyst for consolidation by the due-date stated in the package.

If any issues arise, informal meetings, tele-conferences, or email discussions may take place in an effort to resolve the issue(s). If the issues cannot be resolved within the nominal time frame for the type of request, they will be addressed during a Pre-CCB meeting or the next AWCCB Meeting.

If there are no issues, or all the issues are resolved and a disposition consensus is obtained, a signature package is prepared for the AWCCB Chair. The Chair may sign the package or if further discussion is requested by the Chair, the package is presented and discussed at the next AWCCB meeting.

Urgent Requests shall be reviewed and comments, additional information, recommendations, and issues forwarded within Five business days following the date of distribution.

Routine Requests shall be reviewed and comments, additional information, recommendations, and issues forwarded within Fifteen business days following the date of distribution.

Fast Track Requests for Change

A request for a change which does not change baseline requirements, and has a low risk solution may be candidate for "Fast Track" approval process. Fast Track requests require a limited review by a subset of the AWCCB members, namely those whose offices are impacted or are owners of the requirements associated with the particular item(s) to be changed .

The Fast Track process is intended to speed up the approval process. It is NOT a short-cut to prepare a request nor a method to bypass appropriate review and approval.

The Fast Track process is NOT intended to allow a request to be submitted with less than all the required information.

The following criteria apply to Fast Track requests for change:

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- Low risk: Solution is identified, the specific change is defined and has been conceptually or functional "proofed".
 - National and/or Program resources are identified and available (approved and committed by resource provider) to develop and implement the change, including funding and manpower to do the work.
 - No new AWIPS system requirements are introduced by the change.
 - Solution must adhere to NWS, AWIPS Program, and security policies, or must include formal waivers.
 - Actions required are coordinated with affected sites and offices.
 - Must be "implement-able" within ninety days.
 - Baseline document changes must be completed by installation date. (As a minimum, comprehensive redlined mark-ups).
 - The Request MUST be properly developed, including all necessary details.

Fast Track requests are to be reviewed and comments, additional information, recommendations, and issues forwarded within Five business days following the date of distribution.

Although the submitter may recommend that a particular request undergo the Fast Track approval process, the NWS Systems Change Manager or the Change Management Analyst reviewing the request shall make the final determination regarding Fast Track processing.

AWCCB REVIEW

The AWIPS Configuration Control Board (AWCCB) shall hold periodic meetings to address issues on requests pending disposition, to Approve or Disapprove requests which have no remaining issues, and to discuss development and implementation status of previously approved requests. These meetings shall be held on a monthly basis, or more often if necessary. (Refer to the AWIPS Configuration Control Board Charter for further information on the AWCCB membership and roles).

For Urgent and Routine requests, the Change Management Analyst forwards RC packages via email with attachments to all AWCCB members for review and comment. The AWCCB members shall provide comments by the requested due date. In general, the "Silence is Consent" rule applies, although members are encouraged to reply even if the reply is "I concur" or "No comment" or similar in

nature. In addition, the Request for Change is available for viewing on the AWIPS Change Management home page.

Emergency requests are forwarded to AWCCB members for review and information. As mentioned earlier, Emergency requests are reviewed immediately by the AWCCB members and the AWCCB Chair, and the AWCCB Chair may approve the request immediately without waiting for consensus.

For Fast Track requests, the Change Management Analyst forwards RC packages via email with attachments to all AWCCB members for review and information, and to specific AWCCB member(s) (based on the impact and areas of responsibility affected by the requested change) for comment and approval consent. The AWCCB members shall provide comments by the requested due date. In general, the "Silence is Consent" rule applies, although members are encouraged to reply even if the reply is "I concur" or "No comment" or similar in nature.

Pre-CCB Meetings

In order to provide a mechanism for organized review and discussion of specific requests, the Change Management Analyst may request a Pre-CCB meeting. The purpose of the Pre-CCB meeting is to provide a forum for AWCCB members, the assigned Engineering Change Project Lead, and other technical personnel (invited as required) to discuss issues and implementation details of one or more pending request. The goal is to ensure that the RC is complete prior to a Full AWCCB meeting, thereby preempting non-decision by the AWCCB due to lack of information.

Full AWCCB Meetings

As stated earlier, the AWIPS Configuration Control Board shall hold periodic meetings to address issues on requests pending disposition, to Approve or Disapprove requests which have no remaining issues, and to discuss development and implementation status of previously approved requests. These are formal meetings with AWCCB Chair attendance.

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Disputes encountered at the AWCCB level can be elevated to the AWPM. Unresolved disputes and issues having a major impact on service requirements, other systems, the NWS organization, NWS budget, previously approved program schedules, and those changes unfunded or without an established requirement are raised to the appropriate NWS level (NWS CMB, NWS Corporate Board, National Requirements Review Board, Systems Coordination Council, or Assistant Administrator for Weather Services.) The NWS Change Management coordination and decision paths are depicted in Figure 3.

Disposition of Requests for Change

Once the review is completed and any issues resolved, AWCCB members determine the disposition of the change request by consensus Approval or Dis-approval of the change request.

Approved change requests

Until the AWIPS program enters the operational phase (Phase 1), the decisions of the AWCCB will be prepared and signed by the AWCCB Chair, and the AWPM will maintain oversight of these decisions.

Once the AWIPS program is in the operational phase (Phase 2), decisions of the AWCCB will be prepared and signed by the AWCCB Chair and the NWS Configuration Management Board (CMB) and the NWS CMB Chair will maintain oversight of these decisions.

Once the change request is Approved, a change Notification Note or an Engineering Change Notification (ECN) is issued for subsequent action and Change Implementation.

Disapproved change requests

If the change request is not approved, the submitter is given notice along with reason(s) for the decision.

Elevation (no consensus)

If a consensus cannot be reached, the change request and related issues may be elevated to the AWPM during Phase 1 or elevated to the NWS CMB Chair during Phase 2.

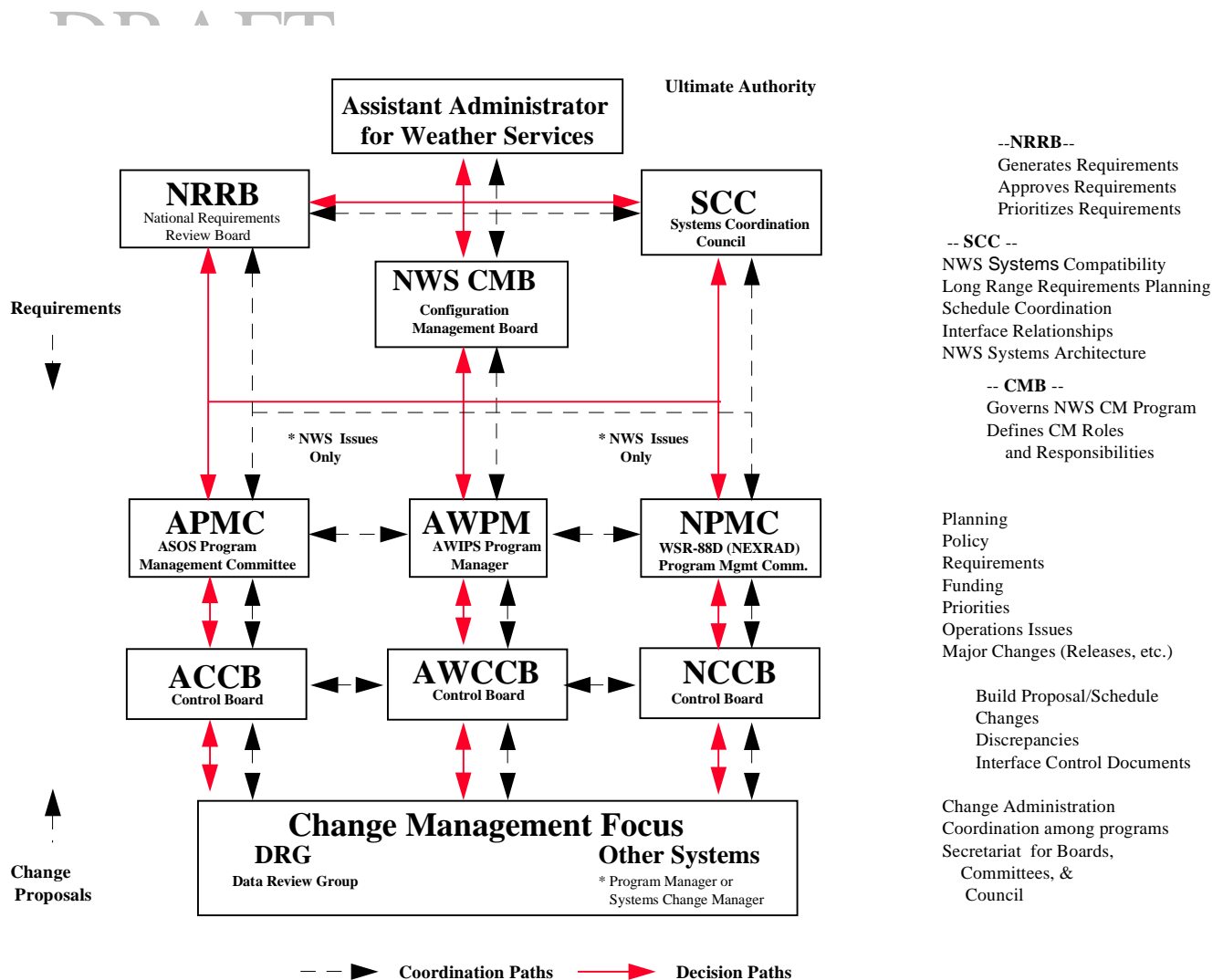


Figure 3. NWS Change Management coordination and decision paths.

Appeals

The submitter of a disapproved request may appeal the decision made by the AWCCB / Chair. The request and associated issues may be raised to the appropriate NWS level (NWS CMB, NWS Corporate Board, National Requirements Review Board, Systems Coordination Council, or Assistant Administrator for Weather Services.)

CHANGE NOTIFICATION

Once the change request is approved, the Engineering Change Project Lead (an AWCCB member or AWIPS Program engineer) takes lead in the coordination and development of implementation / test plans, Modification Notes and/or Engineering Change Notice (ECN), and/or software release notes.

Change Implementation Notification

Actual change implementation (software and/or hardware is installed, or document update is completed and released), is to be performed based on the appropriate implementation notice. The following implementation notices are to be used:

Modification Notes (Mod Notes) provide detailed instructions for hardware modifications and instructions for software installation.

Engineering Change Notices provide detailed changes to documentation.

CHANGE STATUS TRACKING

From the initial receipt of the Request for Change, the Change Management Section provides status tracking for the Change request. The status is tracked based on the following activities taking place:

Receipt of Change request	Date
Initial review	Date

Change Processing:	Status to include issues and approval process used (Fast Track/Normal).
Change Disposition:	e.g. Approved and Date.
Change Notification Issued:	Mod. Note or ECN number.
Implemented:	Date. Note implementation is verified by PCA/FCA, EMRS* or CM Status reports from contractor.

Note* EMRS is the Engineering Management Reporting System, used by the Electronics Technicians to provide status on work performed.

The RC status information is maintained in a database by the Change Management Section, and is updated by the change analysts. A standard report indicating status of the change requests is available via the internet for viewing by all interested parties at the AWIPS Change Management home page at <http://www.nws.noaa.gov/oso/oso1/oso11/oso112/awips.html>

The Closed loop process is maintained by tracking the status AND implementation of the change. Monitoring the actual installation status via the Engineering Management Reporting System (EMRS) allow for the tracking of the change to the point of 'closure', that is, when installation/implementation is completed.

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REGION APPROVED REQUESTS FOR CHANGE

A special case of Requests for Change (RCs) called Region Approved Requests for Change is provided for connections to a limited number of local AWIPS/LDAD interfaces. Such requests may be approved by the region if all of the necessary conditions are met.

In a Region Approved RC, the responsible Regional AWIPS CM focal point (individual with CM Signature Authority) has the authority to approve the request. An RC form must still be generated and submitted to NWSRC mailbox for information, tracking and status / configuration database updates.

REGION APPROVED RC PROCESS OVERVIEW

The following is a brief overview of the process for generating, submitting approval and tracking of Region Approved Requests for Change.

1. The requesting individual prepares a Request For Change (RC) using a standard form, *NWSRC Form⁵ 1001*.
2. The RC Form is sent to the Submitting Authority (SA) for evaluation, concurrence and APPROVAL. If the SA determines that the request is valid and approves the change request, it is then forwarded to the Systems Change Manager via mailbox NWSRC@noaa.gov.
3. The NWS Systems Change Manager receives the request from NWSRC mailbox and assigns it to the appropriate analyst who logs the RC and provides status accounting information as it is made available.
4. Once a change is approved by the Region, the local site and the region are responsible for ensuring that implementation plans are carried out, and the change is properly documented.
5. Development work is completed and hardware/software installations are performed, tested and documented.

⁵Available at: <http://www.nws.noaa.gov/oso/oso1/oso11/oso112/awips.html>

6. The Request for Change is closed and necessary AWIPS Configuration Management data base / status reports are updated once the change is reported to the Weather Service Headquarters through the Engineering Management Reporting System (EMRS).

Generating Region Approved Rcs

Region Approved Requests are generated by a site or Regional representative. The requesting individual prepares a Request For Change (RC) using a standard form, *NWSRC Form 1001*. The information required in the RC is coordinated with the requestor's submitting Authority. The requestor may request assistance from a representative AWCCB member or NWS Change Management Analysts in the preparation of the request. Region Approved RC shall meet the following criteria:

- The change must consist of a connection to an available port or connection to one of the following interfaces⁶.

LDAD Terminal Server (Modem or PC/Serial interface).
LDAD HUB (Direct or via router)
AWIPS Asynchronous Product scheduler
AWIPS LAN HUB
- The connection must use baseline approved hardware and/or interfaces (such as approved direct connection modems).
- The change and implementation must adhere to all NWS / AWIPS policies.
- Any new software required with the new connection must be of the type which can be developed as a 'local application' (i.e. no changes to AWIPS baseline software).
- The Region and site assume full responsibility for any negative operational impacts, damage or liability as a result of the use or misuse of the interface and associated software, files, etc.

⁶ See Appendix C for specific interface points and or ports available.

- The local software must be modified, if needed, to accommodate new AWIPS releases, patches or upgrades and not the other way around.
- The change must be subject to 'back-out' if problems arise or port is required for new national application.
- NCF shall not incur the responsibility of restoring the interface or associated files after an NCF initiated site restoration or installation of new baseline software.

Region Approved Request for Change Submission

In order to maintain AWIPS system configuration status and verify interface connections to AWIPS systems, the NWS Systems Change Manager and Configuration Manager must receive copies of all Region Approved Requests for Change.

Requests for Change shall be submitted to the NWS Systems Change Manager by the Regional Submitting Authority which has approved the request. The RC may be sent in the form of an electronic (soft) copy of the RC form (in WordPerfect format) to mailbox NWSRC@noaa.gov.

Review Process

The NWS Systems Change Manager assigns a Change Management Analyst to review Region Approved requests. The review process includes the following tasks:

- a. Confirm that all required information is provided.
- b. Verify that the request does in fact qualify for Region Approval.
- c. Log the request in the Change Management Database and make it available for viewing by AWCCB members and others.

Change Status Tracking

From the initial receipt of the Request for Change, the Change Management Section provides status tracking for Region Approved Change Request. The status is tracked based on the following activities taking place:

Receipt of Change request	Date
Change Disposition:	e.g. Approved and Date.
Change Notification Issued:	Mod. Note or ECN number or other details as provided.
Implemented:	Date. Note implementation is verified, EMRS* and/or CM Status reports from contractor.

Note* EMRS is the Engineering Management Reporting System, used by the Electronics Technicians to provide status on work performed.

The RC status information is maintained in a database by the Change Management Section, and is updated by the change analysts. A standard report indicating status of the change requests is available via the internet for viewing by all interested parties at the AWIPS Change Management home page at <http://www.nws.noaa.gov/oso/oso1/oso11/oso112/awips.html>

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APPENDIX A - AWIPS Baseline Documents

The following is a list of AWIPS documentation which define the baseline. At any point in time, the latest released revision shall be the effective document in defining the baseline. Although this list was current at the time the document was written, new and updated documents are added as they are released. Refer to the AWIPS Change Management homepage for a current listing at <http://www.nws.noaa.gov/oso/oso1/oso11/oso112/awips.html>

Engineering Drawings

AWP-000000-###-1##	AWIPS WFO/WFO-C System Drawings
AWP-000000-###-2##	AWIPS RFC System Drawings
- TBD -	AWIPS NC System Drawings
AWP-000000-###-5##	AWIPS NCF System Drawings
AWP-000000-###-6##	AWIPS NRS System Drawings
AWP-000000-301-00##	Cable Assembly Product Drawings
AWP-000000-109-0###	AWIPS Product Drawings
G-AWP-000000-109-0##	AWIPS Vendor Item Drawings

Program Specifications

SSS-001-1994R1 CH-2	System Segment Specification (Type A) for the National Weather Service
PRC AWP.HW.SRS-05.00	Hardware Requirements Specification for Build 4
NRS	NOAAPORT Requirements Specification
PRC AWP.SSD-04.00	System Subsystem Design Description (SSDD) for Release 4.2
PRC AWP.DSN.IDD-06.0	Interface Design Description (IDD)
PRC AWP.DSN.DBDD.	Database Design Description for Build 3
	BLD3-01.00

Interface Control Drawings

AAO130001R1	LDAD ICD
AAO130002 R1	AWIPS/NOAA Weather Wire Service ICD
AAO130003 CH-1	AWIPS/RFC/NCCF ICD
AAO130004 R1	AWIPS/GDUC ICD
AAO130005 R1	AWIPS/Local Campus Network ICD
AAO130006 R2 CH-1	AWIPS/NWSTG ICD
AAO130007	AWIPS/MIDDS ICD
AAO130008 CH-2	AWIPS/NESDIS ICD
AAO130009	AWIPS/OAR ERL ICD - not released
AAO1300010	AWIPS/CDA ICD -not released
AAO130011 R1	AWIPS/RFC Gateway II ICD
AAO130012	AWIPS-NOAAPORT Receive System/NOAAPORT Users External System ICD
AAO130013	AWIPS/AFOS ICD
AAO130014	AWIPS/NWSTG 10BASE-T High Speed Interface ICD
50-SANW-1-00050	ASOS/AWIPS ICD, Appendix XI
50-DDNW-5-00045	CRS/AWIPS ICD, Section AC.3, Modification 6
1208304I	Interface Control Document for RPG/Associated PUP
1208305H	Interface Control Document for RPG/RGDAC and RFC
1208306H	Interface Control Document for Unit/Non-Associated PUP
1208378G	NEXRAD Product Specification Interface Control Document (ICD)

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Interface Control Drawings - continued

NAS-IR-43020001 Rev. NADIN X.25 Packet Mode USERS ICD
Specification #17558 WMSCR/NADIN PSN USERS ICD

Data Sets

IP Address Data Set IP Address Database in Microsoft Excel Files:
IP Address Data Set IPAD_SPL.WK4, IPAD_A_L.WK4 & IPAD_M_Z.WK4

Manuals

PRC AWP.USR.MAN-07.0 AWIPS Users Manual for Release 4.2
PRC AWP.TRG.SMM-07.0 AWIPS System Manager's Manual for Release 4.2
FSL/APO LDAD System Manager's Manual
Memorandum - S. Graf AWIPS Era Operating Procedures (AEOP) Manual, Version 3
NWSTC (training) AWIPS Systems Manager Course Manual
NWSTC AWIPS Applications Development Course Manual - draft

System Administration Note

ASAN-X AWIPS System Administration Note X (where x is a number)

CDRL

PRC AWP.MMM.MTN.00.0 Maintenance Document CDRL A079
PRC AWP.FDC.NMC-01.0 Build 3 Network Monitoring and Control Facility Documentation CDRL N033
PRC AWP.MAN.COMM- 03 Communications Interface Document (CID) for Release 4.2 CDRL P032

Facilities documentation

PRC AWP.FDC.NMC-02.0 Network Monitoring and Control Facility Documentation

Test Procedures

PRC AWP.PRO.SYAT. Final Release 4.1 Network System Acceptance Test Procedures NET-01.00
PRC AWP.PRO.FAT-06.0 Factory Acceptance Test Procedures for Release 4.1.1
PRC AWP.PRO.SAT. Site Acceptance Test Procedures for Release 4.1.1 REL41-02.00
FLS-001-1995 R2 AWIPS Full-Load Test Scenario
PRC AWP-99-90361 AWIPS System Acceptance Test Procedures for Release 4.2

Software Description

PRC AWP-99-90361 Release 4.2 Software Listing
PRC AWP.DSN.VDD-09.0 Version Description Document for Release 4.2

Plans

Draft 2.0 AWIPS Local Applications Management Plan

Policy

APO-99-0276 Memo AWIPS Security Policy
J. Kelly, Jr. Memo Policy on Changes to Installed AWIPS Configuration

**APPENDIX B - AWIPS Request for Change Signature Authority
(Submitting Authority) listing.**

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WS Office of Meteorology
Gregory Mandt (Acting), W/OM Rm 14348
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(301)713-0462 x132

NWS Office of Hydrology
Danny L. Fread, W/OH Rm 8212
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NWS Office of Systems Development
Harry R. Glahn (Acting), W/OSD2 Rm 10214
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NWS National Centers for Environmental Prediction
Louis W. Uccellini, W/NP WWBG Rm 101
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Designate: N/A

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(516)244-0100

Designate: Theodore W. Wilk, W/ER4
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NWS Pacific Region Headquarters

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Mauka Honolulu, HI 96813-3213
(808)532-6416

Designate: Edward H. Young Jr., W/PR1
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NWS Training Center

John L. Vogel, W/TC
7220 NW 101 Terrace
Kansas City, MO 64153-2371
(816)880-9594

Designate: N/A

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APPENDIX C - AWIPS Interface / Port Availability

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This listing indicates AWIPS (and LDAD) interfaces and ports which are available for local site use.

The existing ports are labeled as:

Assigned - if they are currently in use or use is imminent.

Reserved - if there is a planned use or for future national use.

Available- available for local use, provided that policies are adhered to and correct procedures are used.

System Interface Point	Interface	Port / Designator	Status
LDAD Mux Panel	Modem		
LDAD Mux Panel	DTMF		
LDAD Mux Panel	RS-232		
LDAD Terminal Server	Direct, RS-232		
LDAD Terminal Server	Dedicated modem via nest		
LDAD LAN Hub	Router connection		
LDAD LAN Hub	direct connection		
AWIPS Asynchronous Product Server	Modem via Distribution Panel		
AWIPS Asynchronous Product Server	RS-232 via Distribution Panel		

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System	Interface	Port / Designator	Status
AWIPS LAN HUB	Pocket Hub		
AWIPS LAN HUB	Direct?		

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